2. UK outlook

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Key findings

- Post-EU-referendum forecasts were not very far off after all. Instead of a short-term
 hit and quick rebound, Brexit slowed growth more gradually. GDP in 2018 looks set to
 be only marginally higher than forecasters expected immediately after the referendum,
 and almost 2% lower than implied by pre-referendum forecasts predicated on a Remain
 vote.
- The UK economy has been somewhat supported by a strong eurozone economy. Contrary to immediate post-referendum forecasts, the eurozone economy appears to have been unaffected by Brexit uncertainty and continues to grow robustly.
- UK consumer spending held up better than expected in the wake of the referendum. However, that has been at the expense of a plunging household saving ratio. With saving rates at historic lows, the consumer might find it harder to ride to the rescue again in the event of a no-deal Brexit.
- A weakened currency, higher inflation, and lower business investment as a result
 of increased uncertainty have all hit UK growth. We estimate that the sterling
 depreciation in the wake of the referendum raised UK consumer prices by 1.7%. These
 outcomes are very much in line with most initial forecasts of the effect of the Brexit
 vote.
- Brexit is likely to weigh on growth for the foreseeable future. Most scenarios will see less free trade with Europe and lower immigration. This would result in lower growth. The scale of long-term effects will depend on how the UK uses any new freedoms. A more liberalised 'global Brexit' in which the UK is open to immigration and free trade will be less damaging to the economy in the long run, but more difficult in the short run, than a 'drawbridge Brexit' in which trade barriers are erected, protectionist policies implemented and immigration minimised.
- Our central assumption is that the UK and the EU agree on a transition period
 preserving essentially the same relationship they have today. This transition period
 will likely have to be extended beyond 2020 in order to facilitate the political calendar,
 detailed future trade negotiations and a ratification procedure that involves national
 and subnational governments across the continent.
- There is some reason for optimism about the UK economy. As the Brexit deadline
 approaches, investment and thus growth are likely to slow further (just as they did prior
 to the 2016 referendum). But after Brexit Day, there could be a growth rebound, before
 new uncertainty about the next Brexit cliff edge sets in.

2.1 Introduction

In addition to globalisation coming under pressure – as discussed in Chapter 1 – another significant challenge to the UK in a globalised world is the 2016 vote to leave the EU. With the Article 50 of the Treaty on European Union deadline on 29 March 2019 approaching, forecasting the UK economy in the short and medium term is subject to unusually high uncertainty as we still do not know what form Brexit will take nor when the changes will come.

In line with many forecasters, we assume the EU and the UK will agree on a transition phase. However, we see a substantial risk that it will take much longer than the 21 months currently envisaged to agree, sign and ratify a treaty on detailed future relations. Experience shows that comprehensive trade deals take years to negotiate even with goodwill and are often subject to delays due to political changes. The current state of UK politics and the prospect of European elections in 2019 make a longer trade negotiation process almost inevitable, in our view. On the positive side, during any such transition not much would change for businesses and consumers, potentially allowing the UK economy to enjoy continued moderate growth or even an acceleration due to pent up demand in the meantime.

In the alternative scenario, where the UK leaves the EU without a deal, we would expect material economic disruption, not least due to a breakdown of political cooperation between the two sides. But that would also be unlikely to be the end state. Businesses would start to adjust to the new environment, and there would still be pressure to negotiate a deal eventually. It would be in the interest of all parties to do so. In addition, after leaving the EU, the UK would have the freedom to make choices about its future regulations, trade rules and immigration systems, with material repercussions for potential growth.

Amid all the uncertainty, the past two years have yielded a wealth of lessons about the UK economy. In particular, the big changes forecasters (including Citi) made to the UK economic projections around the EU referendum and how the economy subsequently evolved provide lessons going forward, starting with the fact that it took longer for Brexit uncertainty to affect growth than most expected. Section 2.2 provides an overview of the UK's recent economic performance, while Section 2.3 compares it with our and other forecasters' projections in 2016. Section 2.4 then presents our current forecasts, based on our 'smooth Brexit' base case. In Section 2.5, we discuss an alternative Brexit scenario in which the UK and EU fail to strike a transition agreement before March 2019. Section 2.6 concludes.

2.2 Recent trends in the UK economy

Following a period of reasonable growth in 2014–16, UK GDP growth slowed in 2017 and so far in 2018 to levels well below historical standards and modest in international comparison. According to the latest ONS data, GDP rose by 0.4% quarter-on-quarter (QQ) in the second quarter of this year, up from 0.1% QQ in the first quarter. The average growth rate of 0.2% QQ so far this year is below that of last year and well below the long-run average quarterly growth rate of 0.5% since 1980. The UK's slowdown also looks like an outlier in international comparison, with both the eurozone and the US outpacing

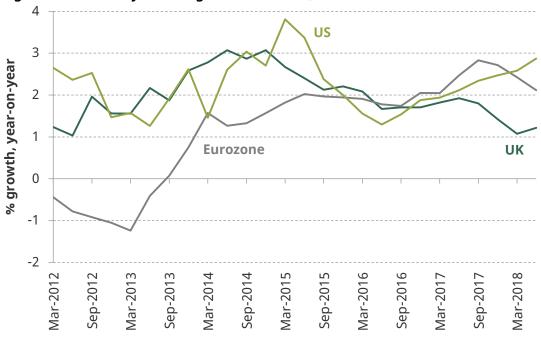


Figure 2.1. Year-on-year GDP growth in the UK, US and eurozone

Source: ONS, US Bureau of Economic Analysis, Eurostat and Citi Research.

Britain since mid 2016 (see Figure 2.1), something which had not happened in the four years prior to 2016.

On the expenditure side, the key drivers of the slowdown since 2016 were lower growth rates in private consumption and investment, which were partly offset by improvements in the trade balance. Consumer spending came under pressure in 2017 as the fall in sterling in the wake of the EU referendum, as well as the rebounding oil price, pushed consumer price inflation above flagging wage growth. And business investment suffered due to Brexit uncertainty. The flipside of weak sterling – and the result of temporarily booming demand in important export markets such as the eurozone and parts of Asia – was growth in the value of UK exports.

This year, the pressure on real wages and thus consumer spending is receding as inflation falls and wage growth shows signs of picking up. The outlook for business investment remains weak and, while global demand growth remains strong, it has become more varied, with the US clearly in the lead and Europe and Asia falling behind (see Chapter 1).

The GDP growth slowdown in 2017 was accompanied by a sharp deceleration in labour input growth, lately partly offset by acceleration in productivity growth, albeit from very low levels. In fact, most of the UK's recovery since the global financial crisis in 2008 was driven by more labour input – i.e. a growing number of employees and hours worked per employee – rather than by productivity growth. Having consistently averaged 2% growth per year in the decades before the crisis, productivity (output per hour worked) was nearly flat in the years following the crisis.

There is some evidence that this may now be changing. As Figure 2.2 shows, in the four quarters to the second quarter of 2018 (2018 Q2), the total number of hours worked shrank by 0.2% year-on-year (YY), the first decline since 2011 Q4. This means that for the

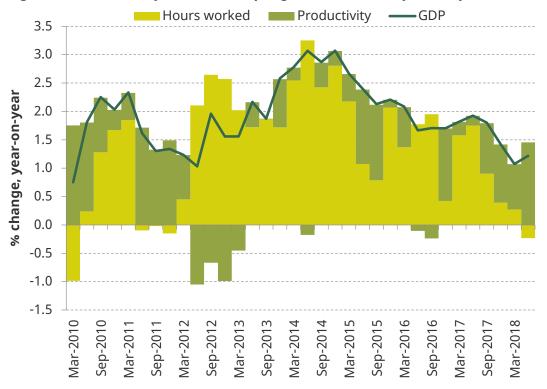


Figure 2.2. Productivity and labour input growth in the UK (year-on-year)

Source: ONS and Citi Research.

first time in nearly seven years, all of UK output growth (1.2% YY in 2018 Q2) was carried by a rise in productivity growth of 1.5% YY. This is the culmination of a slow recovery in productivity growth: over the last seven quarters, productivity growth has averaged 0.8%, almost three times the average pace between 2011 and 2016. However, caution is still warranted as the improvement is driven largely by reductions in hours worked per employee, which could be erratic. In any case, this welcome improvement still leaves productivity growth below the 2% per year that the UK achieved on average over decades prior to 2007.

Optimists on productivity growth have long argued that weak productivity growth was probably a temporary phenomenon at least partly due to the lasting effects of the financial crisis. With investment currently so weak (see Section 1.3) and thus a limited scope for capital deepening in the production process, the tightening labour market and recovering wage growth may force companies to make more efficient use of their existing pool of workers. Improved production processes (total factor productivity) could lead to higher productivity growth despite weak investment. If the acceleration in productivity growth to 1.5% YY is sustained or even gives way to a further increase, many official forecasts of productivity growth, and with them the public finances, would be likely to prove too pessimistic.

The Bank of England currently expects productivity growth at only 1¼% in the coming two years. Partly as a result, it estimates potential growth at only 1½% per year, which makes the moderate GDP growth rates of 1¾% per year it forecasts over the next few years enough to guide the economy into excess demand and thus growing inflationary pressure. This is the key narrative for the Bank's nascent rate hike cycle. If, however, the

rising wage growth the Bank observes is not the result of a tighter labour market but rather the result of recovering productivity growth (effectively companies unearthing significant slack in poor production organisation), then slack in the economy may be increasing and, with it, cost pressures actually decreasing. Similarly, the Office for Budget Responsibility (OBR) estimated in March that productivity growth would stay even lower, at only 1% per year until 2022, which is a key ingredient for the OBR's relatively pessimistic growth forecasts and thus public sector borrowing forecasts.

A rebound in productivity growth could have important consequences for longer-term projections. However, in the short term, fluctuations in external demand – as well as domestic developments mainly related to the Brexit process – drive UK GDP growth. And in this respect, the fact that GDP growth in 2018 is still broadly on track for the OBR's March forecast of 1.5%, and probably only mildly undershooting the Bank of England's November 2017 forecast of 1.7% YY growth by the fourth quarter of this year, is positive news. It shows an encouraging resilience in the face of major fragilities in global growth as well as uncertainty about whether the UK can secure even a Brexit transition – let alone a permanent trade deal – six months before the scheduled Brexit day. However, this resilience could still be tested in the coming months and years and does not mean that these headwinds – and the Brexit process in particular – have not had any impact on the growth trajectory since the referendum.

2.3 The EU referendum impact so far

The vote to leave the European Union on 23 June 2016 was an unpleasant surprise for most professional forecasters. It triggered a scramble to revise down GDP forecasts. Most downward revisions amounted to 2–3% of output in total over the period from 2016 to 2018 (see Table 2.1). The downward adjustments were typically frontloaded, sometimes even including a recession in the immediate aftermath of the EU referendum, followed by a swift recovery of growth (but still leaving a permanently lower path for output).

Initially, these forecast changes proved too pessimistic. If anything, growth in economic activity accelerated after the referendum. However, as GDP growth then slowed in 2017 and 2018, the level of GDP today is not much higher than forecast at the time. The forecasts simply overestimated the swiftness with which Brexit affected the economy.

The forecast errors in the immediate aftermath of the referendum continue to impact on the Brexit debate. The alleged collective failure to predict the economic implications of the EU referendum undermined the credibility of economists' advice, at least in the eyes of some pro-Brexit participants in the UK's political debate. There is an important risk that the pendulum of forecast bias has now swung the other way and that the risks from the Brexit process are now underestimated. It is hence important to understand how much the post-referendum forecasts deviated from the actual outcomes and why. This can provide important lessons for the current forecasts of what the economy would do in different Brexit scenarios, in particular if the UK and the EU fail to strike a deal, which leads to an abrupt EU exit on 29 March 2019.

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Table 2.1. GDP growth forecasts and actual growth rates

	2016	2017	2018	Cumulative, 2015–18
Pre-referendum (average)	1.9	2.2	2.3	6.5
Citi, May 2016	1.7	2.1	2.3	6.2
BoE, May 2016	2.0	2.3	2.3	6.7
IMF, April 2016	2.4	2.5	2.4	7.5
Consensus, June 2016	1.9	2.1	-	-
Post-referendum (average)	1.7	1.0	1.7	4.4
Citi, June 2016	1.3	0.9	1.5	3.7
BoE, August 2016	2.0	0.8	1.8	4.7
Consensus, July 2016	1.6	0.7	-	-
IMF, July 2016	1.7	1.3	-	-
IMF, October 2016	1.8	1.1	1.7	4.7
OECD, September 2016	1.8	1.0	-	-
Actual	1.8	1.7	1.4	4.9
Difference from pre-referendum	-0.1	-0.5	-0.9	-1.6
Difference from post-referendum	+0.1	+0.7	-0.3	+0.5

Note: Actual for 2018 equals September 2018 Consensus Economics forecast.

Source (in noted periods): Bank of England Inflation Report; IMF World Economic Outlook; OECD Economic Outlook; Citi Research Global Economic Outlook and Strategy publication; Consensus Economics.

How forecasts changed around the referendum

Pre-referendum: base case was Remain vote and accelerating growth – Just before the 2016 EU referendum, UK economic growth had slowed down quite markedly, which was widely interpreted as a sign of pre-referendum nervousness. Most forecasters expected a vote to stay in the EU and factored in some growth recovery in the second half of the year, allowing the UK economy to grow by just under 2% in 2016. For 2017 and 2018, consensus (as well as Citi and the Bank of England forecasts) was for a moderate acceleration of growth to just over 2%. Forecasters also expected that the long decline in unemployment would stop somewhere just below 5%, which was most analysts' estimate of the natural rate. Projections were for a rebound of price pressures, with CPI inflation expected to rise from 0% in 2015 and 0.8% in 2016 to about 1.5% in 2017 and possibly reaching the Bank of England's target of 2% in 2018. These forecasts were often calibrated on sterling remaining around then-prevailing levels (roughly 1.45 to the dollar and 1.30 to the euro) as well as oil prices staying around the \$50 mark per barrel Brent.

Pre-referendum: alternative scenario would reduce GDP by at least 3% – Many forecasters had also published estimates and simulations of what a vote to leave the EU would entail for the economy. For example, under this scenario Citi projected a cut in GDP

forecasts of 3–4%, a 15% drop in sterling and inflation rates of 3–4% in 2017 and 2018.¹ Citi also expected the Bank of England to cut its policy rate by 0.25 percentage points (ppts) and perhaps restart asset purchases. In case of disorderly financial market adjustments, coordinated global central bank interventions would be likely. Others were more aggressive: the UK Treasury estimated a GDP peak downward revision of 3.6–6% over just two years and inflation rates 2.3–2.7ppts higher than the baseline, i.e. rising above 4%.² The Treasury also forecast a recession and a large rise in unemployment, necessitating fiscal tightening (and potentially Bank of England rate hikes) to maintain the UK's fiscal and external credit solidity.

Forecast changes after the referendum: sharp growth deterioration, quick recovery

– After the surprise outcome of the referendum, Citi and most others adjusted their forecasts. We built on our pre-referendum simulations, but also factored in the reaction in asset prices on 24 June, which saw sterling drop by 12% against the dollar and 10-year gilt yields plunge by 0.50ppts to 0.9%, both roughly in line with our expectations in the case of a Leave vote. In the weeks and months following the referendum, almost all forecasters cut their projections for UK growth in the second half of 2016.

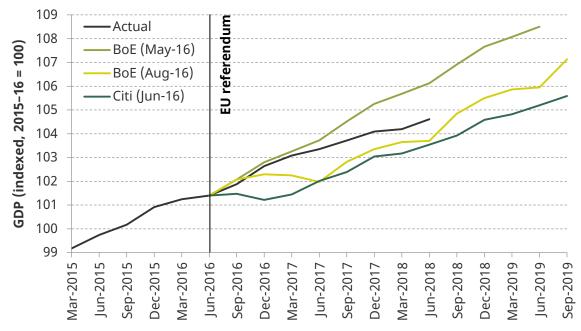


Figure 2.3. Forecast and actual UK GDP (2015–16 = 100)

Source: ONS, BoE and Citi Research.

For example, Citi economists said on the morning of the referendum: 'We would expect a Brexit vote to lower UK GDP by 3–4pp compared to the baseline over the next three years, sterling to depreciate further by around 15% and inflation to rise to 3–4% in 2017–18'; see Citi Research, 'UK Economics Focus – referendum preview: base case "close remain"', June 2016,

https://www.citivelocity.com/rendition/eppublic/uiservices/open_watermark_pdf?req_dt=cGRmTGluaz1odHR wcyUzQSUyRiUyRmlyLmNpdGkuY29tJTJGdmZQdFMlMjUyQlE3bXk0ZlpGTDlFZEZaWWEydURZbThQbllGOTFaaF NEMGxOOEJTT1dqTEcxJTI1MkI5WUhZQk9yQWFmN3NTcTgwWHpTQ2o2MEUlMjUzRCZ1c2VyX2lkPTEtMUk0UkF CQyZ1c2VyX3R5cGU9Q1JN.

² HM Government, 'HM Treasury analysis: the immediate economic impact of leaving the EU', May 2016, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/524967/ hm treasury analysis the immediate economic impact of leaving the eu web.pdf.

Citi's first post-referendum forecasts saw GDP growth slow to near zero by the end of 2016 and then rebound to almost 2% YY by late 2017 before settling around the 1.5% level in 2018 and 2019 (see Figure 2.3). On a cumulative basis, the downward revision was 2.5% over the entire 2015–18 period, at the smaller end of the adjustment we had anticipated prior to the referendum in case of a leave outcome.

Other forecasters followed suit. By August 2016, the consensus and the Bank of England (BoE) growth forecasts had dropped to a similarly deep but slightly more protracted slowdown (see Figure 2.3 and Table 2.1) compared with Citi's call. The Bank, but also the IMF and other institutions, then expected growth to rebound to trend rates in 2018 and beyond (see Table 2.1). The cumulative downgrade to GDP forecasts usually ranged between 2% (Bank of England) and 3% (IMF) over the 2015–18 period, i.e. also at the smaller end of what forecasters had warned about before the referendum. We see two reasons for that. First, in July, the ONS published a first estimate for 2016 Q2 GDP to have grown by an above-consensus 0.6% QQ. Second, some forecasters may also have taken into account a more favourable market and policy reaction and less political turmoil than they had initially anticipated.

While growth forecasts dropped, inflation forecasts went up, as anticipated. With sterling suddenly around 1.10 to the euro and 1.30 to the dollar, Citi saw 2017 CPI inflation a percentage point higher than previously at 2.5%, while the Bank of England put its CPI forecast for 2017 only a bit higher at 1.9%. As output growth was expected to slow, forecasters also predicted a rise in the unemployment rate from around 5% at the time of the referendum to closer to 6% by 2018.

Actual outcome: immediate growth boost, gradual loss of momentum – Financial asset prices such as sterling and gilt yields reacted in the same direction as expected and confidence indicators initially plunged to recession levels. However, economic growth initially confounded the bearish expectations. As Figure 2.3 shows, GDP growth did not slow but in fact accelerated markedly from ¼% on average per quarter in the two quarters preceding the EU referendum to 0.5% QQ in Q3 and even 0.7% QQ in Q4.

In particular, consumer spending surged in the immediate aftermath of the referendum. Households probably took a much more benign view on the consequences of Brexit than markets and economists, at least when it came to their personal finances.³ In addition, some consumers who had been afraid of the consequences of the referendum beforehand may have been encouraged to make long-delayed purchases after the initial economic reaction to the vote was not as bad as expected. Finally, some households may have brought forward purchases in anticipation of higher prices due to weak sterling. The unexpected surge in spending was not to last, however: growth dropped in 2017, with quarterly growth averaging only 0.3% QQ in 2017. Annual GDP growth peaked in mid 2017 at 1.9% and fell to 1¼ per cent in 2018. This profile of growth first accelerating after the referendum and then slowing down was the exact opposite of what forecasters had expected.

Despite getting the profile wrong, cumulatively post-referendum forecasts were not so bad. Averaging across the various forecasts made immediately after the referendum, economists at the time expected 2018 GDP to be 4.4% higher than in 2015, 2ppts less than

³ https://www.theguardian.com/politics/ng-interactive/2018/jan/26/guardian-icm-brexit-poll-full-results.

on average in the pre-referendum forecasts. That is not too far off the actual outcome. If we assume it will grow in line with the current Consensus Economics forecast by 1.4% for 2018 as a whole, this year's output will be 4.9% higher than in 2015, which is much closer to the post-referendum forecast than to the pre-referendum forecast.

What can we learn from the Brexit forecasting experience?

Few things in economics ever evolve exactly as forecast. Even if they do, it is almost always the result of several forecast errors offsetting each other rather than a precise point forecast. Indeed, most economists' post-EU-referendum forecast changes may have proved more right than wrong, at least cumulatively, but only because the economy twice did not do what we expected. As the two errors were in opposite directions, they offset each other.

A first lesson for future forecasts is that not all political events that trigger uncertainty affect the real economy quite as quickly as, say, the bankruptcy of the Lehman Brothers investment bank did in 2008 or the bond market turbulences in the eurozone in 2011–12. The real economic impact of financial market turbulences can be cushioned by swift action by authorities such as the central bank to ensure a smooth functioning of financial markets and bank liquidity provision, as well as strong intermediaries, in particular banks. Both of these mitigating factors were in play in the UK after the EU referendum.

In this subsection, we summarise some of the other lessons from the Brexit forecasting experience.

Business investment is the key Brexit weak spot – In the wake of the EU referendum, most forecasters expected a recession in business investment to be the key channel transmitting Brexit uncertainty to the real economy. That proved largely correct. For example, the Bank of England had expected business investment in 2018 in real terms to be nearly 20% higher than in 2015, but after the referendum the expectation was for it to fall initially and then rebound, remaining flat overall. Put differently, the Bank expected business investment alone to add 1.8% to GDP in 2015–18 and thus account for more than a quarter of total GDP growth in this period (see Figure 2.4). After the referendum, the Bank of England expected it to instead subtract 0.1% from GDP. And indeed, business investment fell in 2016 Q4 and 2017 Q1, rebounded only modestly later in 2017 and has been largely flat so far this year (see Figure 2.5). Cumulatively, business investment will have added only around 0.3% to GDP in 2015–18 or about 6% of the total GDP growth over this period. This UK weakness particularly stands out in comparison with other economies that were similarly advanced in the economic cycle such as the US and Germany (see Figure 2.6).

Don't bet against the consumer – Just before the referendum, we and the Bank of England had expected private consumption in 2018 to be around 8% higher than in 2015, but then halved that forecast to around 3–4% following the referendum. Currently, most estimates see real private consumption exceed 2015 levels by more than 6% this year, even despite higher-than-expected inflation. A key part of this resilience appears to have been the collapse in the household saving rate, which started in 2015 but continued to historically low levels after the referendum (see Figure 2.7). While some of this may be a temporary effect of withdrawals under the new pension freedoms, it could also suggest that households looked through the spike in inflation and saw no need for increased precautionary savings due to Brexit uncertainty. There is a risk in this behaviour. The lack

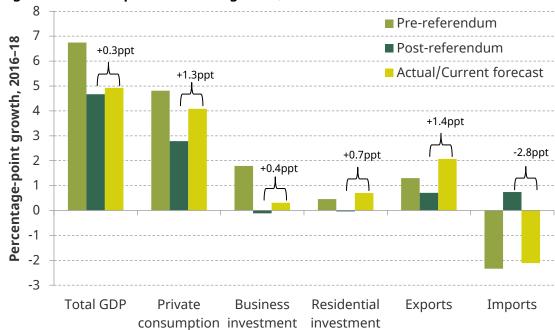


Figure 2.4. UK components of GDP growth, 2016-18: BoE forecast and actual

Note: Remaining error due to public consumption, inventories, and statistical errors and rounding. Source: BoE and Citi Research.

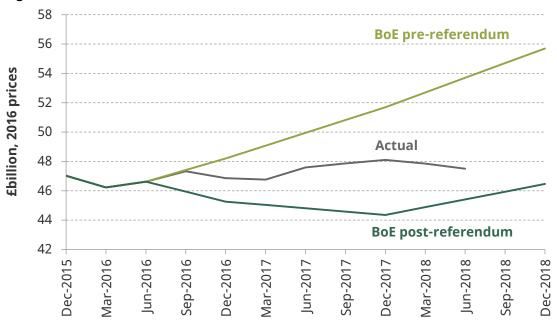
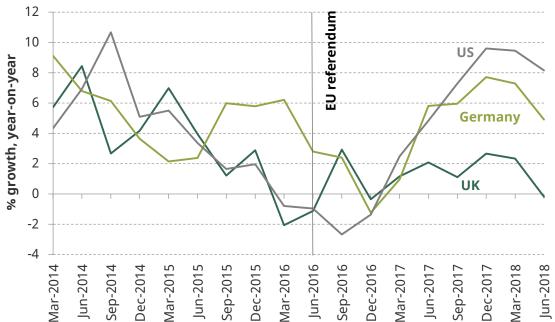


Figure 2.5. UK business investment

Note: BoE pre-referendum forecast was made in May 2016. BoE post-referendum forecast dates from August 2016.

Source: Bank of England and Citi Research.

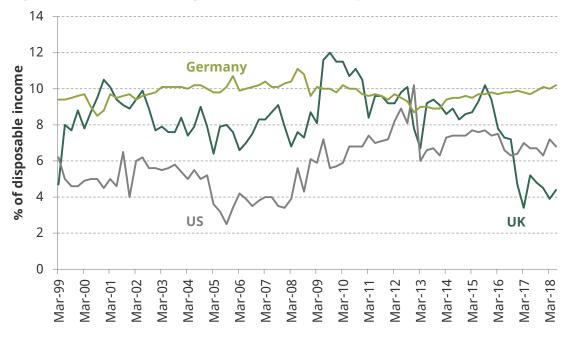
Figure 2.6. Year-on-year growth in business or machinery and equipment investment in the UK, Germany and the US $\,$



Note: UK: business investment; US, Germany: equipment investment.

Source: Eurostat, ONS, US Bureau of Economic Analysis and Citi Research.

Figure 2.7. Household saving rate in the UK, Germany and the US



Source: ONS, Destatis, US Bureau of Economic Analysis and Citi Research.

of saving reduces consumers' capacity to smooth spending through the next downturn. If Brexit negotiations end in acrimony and failure to agree a deal, output could plunge (see Section 2.5). Contrary to 2016, consumer spending might this time amplify rather than smooth the impact.

Import substitution takes a lot of time – In the wake of the referendum, many forecasters expected a cumulative decline in imports due to weak domestic growth, the substitution of UK goods for imports due to higher prices on the back of the weaker exchange rate, and the strategic localisation of supply chains ahead of leaving the EU. The Bank of England, for example, expected falling imports to add 0.7 percentage points to GDP growth in 2015–18 (see Figure 2.4). That clearly did not materialise, at least not initially. Driven by robust consumer spending growth, imports rose by a solid 3.3% in 2016 and 3.2% in 2017, subtracting 2.1ppts from growth in 2015–18, nearly in line with Bank of England expectations before the referendum. However, the forecast may still become true with a lag, as imports of goods and services have fallen in the last three quarters until 2018 Q2.

Brexit has had virtually no impact on the rest of the world – Forecasts for global growth in general, and in particular for the eurozone, around the referendum proved far too pessimistic. Both the Bank of England and Citi expected eurozone GDP to rise by 5% between 2015 and 2018 before the referendum and then reduced that figure by about a percentage point to 4% immediately after the referendum. Collateral damage from Brexit was expected to reduce 2017 growth from a pre-referendum forecast of 1¾% to 1¼%. In reality, however, the eurozone economy, which accounts for about half of UK trade, expanded by precisely double that pace in 2017 and is expected to post another solid performance in 2018. Output in 2018 could end up nearly 7% higher than in 2015, or 3% above the post-referendum consensus expectation.

US growth was never expected to be hit by Brexit. The US economy had a much weaker-than-expected 2016 (only 1.5% GDP growth), an in-line 2017 (2.2%), but is this year expected to grow by 3%, significantly faster than most economists expected in 2016. That of course reflects another political surprise, the election of Donald Trump as US President, which brought an unexpected large-scale fiscal loosening via tax cuts and spending increases.

Because the rest of the world was unaffected by Brexit, external demand was able to have a stabilising effect on UK growth. Levered up by any depreciation of sterling, UK exports of goods and services look set to be up by around 8% between 2015 and 2018 rather than the mere 2.5% increase the Bank of England expected right after the referendum.

Long lags and policy supported residential construction investment – Bank of England and market forecasts for private residential construction were far off the mark. The Bank and Citi expected a cumulative downturn of 5–8% in 2017 right after the referendum, but construction investment actually ended up with a 10% increase and is on track for another solid increase in 2018. While residential construction is a relatively small part of total output (3%), it alone created a forecast error for the Bank over the 2015–18 period of 0.7% of GDP (see Figure 2.4). We attribute this forecast error to a much greater inertia in construction investment than anticipated (developers looking through changes in the economy that they expect to be cyclical) and to policy support from the government such

as the Help to Buy scheme and various initiatives mostly in the Autumn Budget 2017, such as planning reform and the £15.3 billion added financial support for home building.

The housing market is (partly) a Brexit victim – Following the EU referendum, both we and the Bank of England expected some fall in house prices. The Bank said in August 2016 that prices would 'decline a little', while Citi warned London house prices could fall by up to 18%. House prices have not fallen, at least not in the UK as a whole (with the exception of modest falls in London), but a clear slowdown is evident and there are other signs of housing market weakness – for example, mortgage approvals continuing to run at a historically modest rate.

If policymakers avoid errors, financial conditions can loosen – Before the referendum, most financial market participants had expected a sharp depreciation of sterling, a fall in gilts and a mixed reaction in equity markets in case of a vote to leave the EU. For example, Citi had forecast sterling to drop by 12% to around 1.14 against the euro and by 20% to around 1.22 against the dollar. Citi had also expected gilt yields to fall to around 1% in the immediate aftermath. We (and probably most other market participants) also expected the Bank of England to cut rates and restart asset purchases. All of these forecasts proved correct. Where the picture is less clear is credit spreads and equity prices: the expectation was for these to deteriorate, which did occur but was reversed quickly.

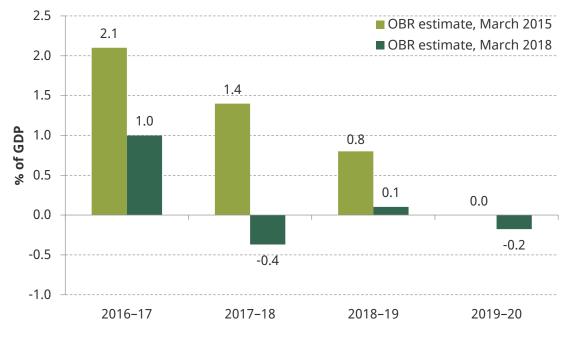


Figure 2.8. Change in the cyclically adjusted primary balance

Note: Positive changes in the cyclically adjusted primary government balance indicate fiscal tightening, negative numbers fiscal loosening.

Source: OBR and Citi Research.

Citi Research, 'UK Economics Focus – referendum preview: base case "close remain"', 2016, https://www.citivelocity.com/rendition/eppublic/documentService/dXNlcl9pZD1ESXl0R2lKUFhjVUxXNWtPZmx 3NFJ3JmVtYWlsX3NlbmRfaWQ9Nzc4MzQ4NTY2JmlzX3ByaW9yaXR5X2VtYWlsPWZhbHNI/c3ViLWNoYW5uZWw9 RW1haWwmZG9jX2lkPTY2NzQ0NiZjaGFubmVsPURDTQ.

In addition to the monetary policy and financial market response, there was also a fiscal one. Before the EU referendum, then-Chancellor George Osborne had planned a frontloaded fiscal tightening of a cumulative 4.3% of GDP over the next three years to keep him on course to meet his then fiscal targets. 5 His successor Philip Hammond diluted these targets and reduced the tightening plans for 2016–17 by half. In March this year, the OBR estimated that the fiscal stance effectively turned neutral from 2017–18 onwards (at least in terms of adjustments to the structural primary government balance). The swift reaction of the Bank of England and the loosening of fiscal austerity, but also the quick restoration of political leadership under Prime Minister Theresa May following David Cameron's announcement that he would resign as PM, were key reasons, in our view, that financial markets settled quickly and supported growth.

Sterling's pass-through to inflation was faster than estimated – Immediately after the EU referendum, the Bank of England expected CPI inflation to average 1.9% in 2017 and 2.4% in 2018, up from 1.5% and 2.1%, respectively, in the last pre-referendum forecast. Citi was more aggressive, expecting inflation to average 2.5% and 2.6% in those two years. However, both forecasts proved too low, and too late. CPI inflation peaked above 3% in Autumn 2017, averaging 2.7% that year and thus 0.2ppts above Citi's and almost a percentage point above the Bank of England's forecast.

It is difficult to disentangle the effect of sterling's 20% EU-referendum-related depreciation since November 2015 on consumer prices from other factors (such as the concurrent rebound in the oil price and domestic inflation dynamics). However, a back-ofthe-envelope calculation suggests that sterling's depreciation pushed up prices by 1.4% over 18–24 months on the back of higher costs for non-energy imports (with prices up by 13%, as shown in Figure 2.9, and these imports making up 11% of CPI). The 20% extra rise

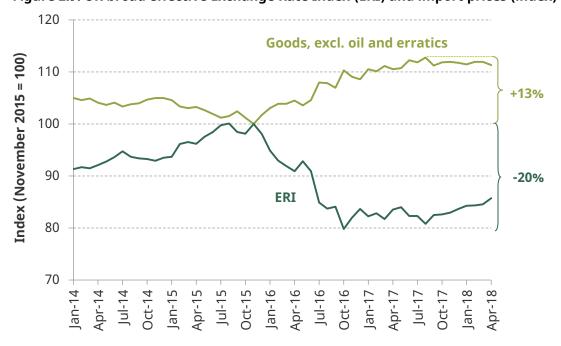


Figure 2.9. UK broad effective Exchange Rate Index (ERI) and import prices (index)

Source: ONS, Bank of England and Citi Research.

We use the change in the structural primary general government balance to measure the fiscal impulse.

in UK oil prices due to sterling may have added another 0.3ppts to CPI over the first 12 months, leading to a total impact of 1.7%. The good news is that this year, inflation is falling as the sterling impact is fading. Consensus Economics reports an average CPI inflation estimate of 2.4% this year (Citi 2.5%).

To sum up, while the impact of the decision to leave the EU on the UK economy has accumulated to substantial levels, forecasters' implicit assumption that it would be frontloaded proved incorrect. The Brexit process did, and does, weigh on investment as expected and reduced consumption growth due to sterling-driven high inflation, but both effects unfolded over a longer-than-expected period. The support provided by monetary and fiscal policy as well as weak sterling and low interest rates helped, but was largely expected before the referendum. The swift handover from David Cameron to Theresa May, on the other hand, may have been a rather unexpected boost to stability, at least initially. These lessons can give some guidance on the potential impact of different scenarios on the months and years to come, with the Brexit deadline approaching and a failure to agree even just on a transition still well within the realm of possibility.

2.4 The short-term UK economic outlook

In the remainder of this chapter, we discuss the outlook for the UK economy. We start in this section with Citi's base case for the short-term and compare with other forecasters. In Section 2.5, we turn to the main alternative scenario – a 'no deal' outcome – and thoughts on the long-term prospects for Brexit Britain.

Until 29 March 2019

While our base case is that the UK and the EU will strike a withdrawal treaty under Article 50 of the Treaty on European Union before 29 March 2019, including a transition period during which materially nothing will change for businesses, we expect the UK economy's resilience to be tested as the Brexit deadline approaches. Companies and households may postpone investments and spending while they wait for confirmation that there will not be a cliff-edge exit on 29 March 2019. And even thereafter, it may take some time for uncertainty to dissipate (before it rises again towards the end of the transition period anyway). For the remainder of 2018 and early 2019, that could mean GDP growth rates falling a little further, to 0.3% per quarter.

The impact of Brexit preparations themselves could be ambivalent: some companies and households will implement contingency plans for Brexit, which could mean capital and workers leaving the country, reducing demand and supply. But it could also mean stocking supplies and localising supply chains and thus more investment in the UK. With important export markets currently slowing (eurozone, China) or not further accelerating (US), additional external support to UK growth is also unlikely, in our view.

Could public and private consumption sustain growth? We would not bet against it (see lessons above). Inflation has faded somewhat, reducing the downward pressure on real wages, which probably caused the slowdown in consumer spending in 2017. On the other hand, as we argued above, households may have to use some of the financial space to replenish their savings, in particular against the background of higher interest rates. The Chancellor has (at least in the short run) some fiscal leeway to smooth growth around the UK's EU exit. Public sector net borrowing in the first five months of fiscal year 2018–19 was

Table 2.2. Citi UK GDP forecasts, quarterly

QQ annualised, %	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4
GDP	0.9	1.5	1.7	1.2	1.3	1.4	2.3	1.8
Private consumption	0.9	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Public consumption	1.5	1.7	1.1	1.5	1.4	2.8	2.8	0.9
Fixed investment	-5.3	3.4	0.6	-2.9	-3.3	2.4	8.1	2.6
Business investment	-1.7	1.9	0.0	-3.9	-3.9	0.0	10.4	2.4
Residential investment	5.9	4.4	0.0	-5.9	-7.8	8.2	8.2	2.8
Exports	0.2	-13.5	4.5	2.8	3.3	2.8	2.4	2.4
Imports	-0.7	-3.2	2.4	0.8	0.8	4.1	4.1	1.6

Source: ONS and Citi Research.

30% lower than in the same period in the previous fiscal year. Even if the downward trend in borrowing may be exaggerated somewhat, Citi currently expect borrowing to come in £5 billion (0.2% of GDP) lower this fiscal year than the OBR expected back in March. Chapter 3 provides a longer discussion on the outlook for the public finances.

On balance, we expect GDP to expand at a pace of around 1.5% annualised in the second half of 2018 and the start of 2019 (see Table 2.2). The Bank of England is a bit more optimistic at the moment, expecting GDP to expand by 0.5% QQ in Q3 and by 0.4% per quarter thereafter. Bloomberg consensus also sees GDP growth of 0.4% (1.6% annualised) for the coming quarters. Citi's full-year GDP growth forecast for 2018 is 1.3%, in line with Bloomberg and Consensus Economics consensus, but below the OBR's 1.5% forecast in March this year.

After 29 March 2019

As outlined above, our base case is that the UK and the EU strike a deal for a transition period during which little changes for the economy. The uncertainty weighing on UK output growth at the moment should turn into relief once this deal is agreed. After the transition agreement has been signed and ratified by the UK and EU parliaments, companies and households should resume business as usual and in addition unblock some of the pent-up investment and spending. Similarly to the period immediately after the EU referendum, this may actually lead to a substantial growth rebound from Spring 2019 (the exact timing depends on when certainty about the immediate post-Brexit future is established), with business investment and likely consumption in the lead.

Table 2.3. Citi UK GDP forecasts, annual

YY %	2017	2018	2019	2020	2021	2022
GDP	1.7	1.3	1.5	1.9	2.0	1.9
Private consumption	1.8	1.1	1.4	1.5	1.6	1.6
Public consumption	-0.1	1.3	1.8	1.2	0.9	0.9
Fixed investment	3.4	0.4	0.5	3.2	2.6	2.6
Business investment	1.6	0.5	-0.2	3.2	2.4	2.4
Residential investment	9.6	6.3	-0.2	3.8	2.8	2.8
Exports	5.4	-0.7	2.0	2.8	3.1	2.6
Imports	3.2	-0.2	1.8	2.1	1.6	1.6
Other forecasters (GDP only)						
Consensus (Bloomberg)	1.7	1.3	1.5	1.6		
IMF	1.7	1.4	1.5	1.5	1.6	1.6
Bank of England	1.7	1.5	1.75	1.7	1.7	

Note: Bloomberg consensus taken on 2 October 2018.

Source: IMF World Economic Outlook (latest interim update), Bank of England August 2018 Inflation Report and Citi Research.

Once a Brexit deal has been struck, we also expect sterling to appreciate as investors adjust asset prices to the confirmation of a transition period and possibly some guidance on the future trade deal. Depending on the extent of this appreciation, some of the post-referendum effects may reverse post-Brexit. For example, stronger sterling may undermine export competitiveness and make the UK a little less attractive for international investors. By contrast, stronger sterling reduces the cost of imports, lowers inflation and thus boosts real purchasing power and real wages. That should support private consumption, at least temporarily, especially given the post-EU-referendum experience that the pass-through to consumer prices might be quicker than in the past.

Interest rates would probably rise across the spectrum of maturities. We would expect the Bank of England to look through short-term disinflationary effects of stronger sterling but respond to the confidence bounce and demand increase by hiking interest rates. Markets would reassess both the Bank of England's rate path and the terminal rate. With both short- and long-term interest rates moving higher, we would expect a significant

tightening of financial conditions, which would dampen growth prospects somewhat, in particular after the initial 'relief rally' following Brexit Day.

Specifically, we expect that after a very soft start to 2019, GDP growth rates will rally to up to 0.6% QQ in the second half of the year, which should help annual GDP growth to rise back to 1.5% in 2019 and around 2% from 2020 onwards. But that factors in a longer transition period than is currently envisaged, because otherwise any relief recovery in 2019 would be cut short if the next Brexit cliff edge looms just 21 months later.

Our view is that the Brexit transition phase will last considerably longer than the 21 months the UK and the EU agreed in March. In 2019, the EU will hold parliamentary elections in May, followed by the election of a new Commission, new EU Council President and possibly a range of other UK-relevant changes. That makes it rather unlikely that substantial negotiations about Brexit can resume before the end of next year. Since the ratification procedure of the future trade deal will almost certainly involve EU-27 national parliaments, and sometimes regional parliaments and possibly even referendums, it seems likely that the transition will have to be extended considerably to conclude a future trade deal. If the transition is extended by just 15 months, the UK would still be largely in the current arrangements by the next (scheduled) UK election. And then the next UK government may want to revise the Brexit strategy, making further delays likely. It is thus the basis of our forecast that not much will change in UK-EU trading arrangements throughout our forecasting horizon until 2022 at least.

That in part makes us significantly more optimistic than the OBR, which in March forecast 1.3% GDP growth for 2019 and 2020, followed by marginal upticks thereafter. Other forecasters are also more pessimistic than Citi, at least from 2020 onwards: Bloomberg consensus sees 2020 GDP growth at only 1.6%. The IMF expects GDP to grow at a trend rate of 1.5% for the foreseeable future, while the Bank of England comes closest to us with a 1¾% per year growth forecast.

As described, most of our relatively optimistic forecast is founded on our particular view of current and future fluctuations in Brexit uncertainty. However, our longer-term productivity view and our medium-term Brexit view probably also deviate from consensus assumptions.

We have already highlighted in Section 2.2 some (admittedly tentative) signs that productivity growth is recovering to historically more normal rates (1.5% YY in output per hour worked in 2018 Q2) as companies make production processes more efficient and more of the after-effects of the financial crisis fade. Labour input growth may be under pressure as immigration from EU countries seems to be receding (see Figure 1.10), but for the time being we expect free mobility of labour to continue and we also still see underemployment in the UK, which may leave scope for further growth in labour input. We therefore still see the UK's potential growth rate as closer to 2% than to 1.5% over the medium term. This is above estimates by the Bank of England and the IMF (both 1.5%) and the OBR (1.4% until 2020).

Inflation outlook

Current UK inflation continues to be pulled and pushed in different directions: the impact of the sterling depreciation in the wake of the EU referendum is fading, allowing core inflation to fall back to its underlying trend. At the same time, rising oil prices are pushing

energy inflation up. As a result of these opposing factors, headline CPI inflation stayed above target through the summer (with the latest release at 2.7% YY in August) and looks set to stay at roughly these levels until Spring 2019 before falling back below 2%.

Monetary policy outlook

With inflation currently above target, unemployment at or below the Bank of England's natural rate estimate of 4.25%, GDP projected to grow above the Bank's potential growth rate estimate of 1.5% per year and the policy rate far away from the Bank's neutral rate estimate of 2–3%, the Monetary Policy Committee sees itself at the start of a gradual rate-hiking cycle, with probably one or two hikes per year. Having hiked in August 2018 to 0.75%, rate setters can now pause to observe the climax of Brexit negotiations. Provided the UK and the EU can agree to avoid a cliff edge, the next 0.25ppt hike could be as early as May 2019, or – as we think is likely – in August 2019 if Brexit uncertainty leads to a temporary dip in growth. We expect the Bank Rate to climb to 1.5% in 2020, at which point the Bank could start reducing the balance sheet through actively unwinding its programme of quantitative easing. This is a significantly steeper path than markets are currently pricing. If Brexit leads to a cliff-edge recession, we would instead expect the Bank to cut rates to zero and expand the balance sheet (an eventuality the markets may be placing some likelihood on).

Fiscal outlook

Low and falling unemployment, rising wage growth, resilient growth in activity as well as evidence of public spending discipline have allowed the government to reduce borrowing by 30% YY in the first five months of the fiscal year. While this performance is unlikely to hold throughout the year, we do expect public sector net borrowing to fall from £39.9 billion in 2017–18 to £32 billion this fiscal year and £30 billion in 2019–20. In our base case of a relatively smooth but drawn-out Brexit, we would expect the Chancellor not to spend the borrowing undershoot and ease policy but to instead reduce debt. Hence we expect general government debt to fall below 80% of GDP by 2021. But as discussed in Chapter 4, this would require fresh tax rises to offset any decision to loosen the envelope for next year's Spending Review.

2.5 No deal

Our main alternative economic scenario in the short term is that the UK and the EU fail to strike a withdrawal and transition treaty, meaning EU treaties would abruptly cease to apply to the UK as of 30 March next year. All evidence at the moment suggests to us that, even if both sides make unilateral preparations for this scenario such as stockpiling key crucial supplies or grandfathering the validity of financial contracts, there would be severe short-term economic disruption in any sector reliant on trade in goods and services with the EU. Table 2.4 presents a summary of trade exposure to the EU, as well as the exposure to EU workers by sector; see Chapter 10 for a further discussion of the different channels that post-Brexit trade barriers can operate through. Manufacturing, financial and professional services, and transport account for 33% of output and nearly 10 million jobs. The disruption could be aggravated if – as is likely – the talks break down in acrimony and mutual cooperation turns into confrontation. Even sectors that do not trade directly with the EU, such as health and education, could be exposed to some disruption via their reliance on EU workers.

Table 2.4. Exposure of different sectors of the UK economy to EU trade & immigration

Sector	2016	% of	2016	2016	EU trade	Employment	Immigration
	GVA	total	exports	imports from EU	intensity	('000s, 2016	law effect
	(£bn)	GVA	to EU (£bn)	(£bn)	(% of GVA)	average)	
Manufacturing	177	10.1	129.0	228.0	202	2,434	High
Accommodation and food	53	3.0	14.8	30.4	85	2,140	High
Agriculture, forestry and fishing	11	0.6	2.1	4.8	63	209	Medium
Mining and quarrying	21	1.2	10.0	2.8	61	54	Low
Financial and insurance activities	115	6.6	28.7	4.1	29	1,013	Medium
Information and communication	107	6.1	15.0	10.0	23	1,237	Low
Transportation and storage	77	4.4	5.6	10.8	21	1,395	High
Professional, scientific and technical activities	215	12.3	23.7	2.6	12	5,101	Medium
Utilities (electricity, water)	46	2.6	1.2	1.9	7	330	Low
Public administration and defence	81	4.6	0.5	1.2	2	1,264	Low
Construction	108	6.2	0.8	0.8	1	1,367	High
Wholesale and retail trade	191	11.0				4,702	High
Real estate activities	242	13.9				493	Low
Education	100	5.7				2,697	Low
Human health and social work	128	7.3				3,958	Low
Others	72	4.1	1.0	0.4	2	1,405	
Sums/Averages	1,744	100	232	298	30	29,799	

Note: Sectors ordered by EU trade intensity. 'GVA' stands for gross value added. Immigration law effect is 'high' in sectors where the share of EU workers exceeds 8% and 'medium' for 6 –8%, according to 2016 GDP data.

Source: ONS and Citi Research.

There is inevitably a great deal of uncertainty about the size of the impact on GDP, but based on analysis presented in December 2017,⁶ we would expect to slash our UK GDP growth forecast by around 5ppts over 2–3 years in case of such a 'no deal' outcome. According to a letter from the Chancellor to the Chair of the Treasury Select Committee,⁷ the UK Treasury fears a 5.0–10.3% hit to GDP over 15 years from exit (as well as £80 billion more public sector borrowing by 2033–34) in such a scenario, an order of magnitude broadly confirmed by the International Monetary Fund in its latest Article IV consultations.

The UK's new choices

We stress that a failure to agree a withdrawal treaty and a transition phase is initially a one-off event, to which the economy will have to adjust. There would undoubtedly be long-term consequences of 'no deal' due to the deterioration of economic and potentially political relations with the EU and its 27 remaining members, but these consequences would also depend significantly not just on future trade deals but also on the choices future UK governments make about how Britain will import goods, services, capital and people in the future, as we highlighted in the above-mentioned December 2017 study into the effects of a no-deal Brexit. Looser relations with the EU and other trading partners – in the extreme, trading on World Trade Organisation (WTO) rules – can give more freedom to the UK to make its own choices on tariffs, regulation, immigration laws and property rights. The choices the UK makes could either improve or worsen its long-term economic outlook after the initial downward shock from Brexit (smooth or not). To highlight this, we specify two extreme (and in this purity unlikely) cases with very different choices.

Global Brexit: deregulation, lower tariffs, more immigration

Some Brexit supporters, at least at times, advocate wide-ranging deregulation of the UK economy after Brexit and the unilateral abolition of import tariffs. While they usually want to restrict immigration, we would argue that a true global Britain would probably also relax immigration rules, at least for highly qualified workers from outside the EU (and not tighten rules for highly skilled EU workers too much). For example, the Migration Advisory Committee proposed in September to drop the cap on highly skilled immigration.⁸

Maximum liberalisation would expose the UK economy to the maximum of short-term competitive pressure. As discussed further in Chapter 10, UK goods and services exporters would not only face new tariffs and non-tariff barriers on their exports to the continent; reduced import tariffs would also allow competitors from the rest of the world to gain market share on British markets without the traditional hindrance from customs and other policy barriers. Expensive British producers might have to downsize or close unless a drop in sterling offset the entire production cost disadvantage the UK likely has compared with the cheapest global producers. Unemployment would rise at least temporarily. Deregulation of labour-intensive services may also weigh on profits, employment and wages at UK services firms. Even in financial services, deregulation may lead to further parts of the industry migrating to cheaper locations with potentially less burdensome rules and regulations.

⁶ Citi Research, 'Brexit: economic and financial implications of "no deal", December 2017.

⁷ https://www.gov.uk/government/publications/chancellor-letter-to-chair-of-treasury-committee-on-no-deal-brexit-economic-analysis.

⁸ Migration Advisory Committee, *EEA Migration in the UK: Final Report*, 2018, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741926/ <u>Final EEA report.PDF</u>.

On the flipside, from the perspective of long-run economic growth, UK exporters would gain price competitiveness over time as labour costs adjust internally due to high unemployment and externally due to sterling devaluation. New trade agreements with important markets, low customs and other barriers to imports and investment as well as potential improvements in competitiveness might offset at least some of the considerable downside of new trade barriers to the EU and attract some foreign direct investment, which in turn would allow the UK to continue to run a current account deficit, at least temporarily, without destabilising sterling excessively. Domestically, cheaper imports from non-EU countries and deregulation would depress inflation and raise the spending power of most consumers. Non-tradable services would benefit and partly cushion the blow from the export sector. In the long run, increasing competitiveness may allow some sectors to overcome export hurdles, in particular if the UK succeeds in striking free trade deals.

Following this model in its entirety would have very substantial up-front costs and would involve significant unemployment and economic disruption in the short and medium run. However, we would not rule out that such a model might lead to relatively high levels of growth and average prosperity in the longer run, even though not necessarily better than in a scenario with continued EU membership. In any case, short- and medium-run impacts would need to be managed very carefully – for example, with long implementation periods.

Drawbridge Brexit: protecting and nurturing UK industry

Alternatively, a future UK government may take a more protective stance. In order to prevent large increases in unemployment, future governments may erect relatively high customs and regulatory barriers. If the UK adopts, for example, the same or even higher tariffs than the EU at the moment (be that regularly or, as the US is currently doing, for specific reasons), or introduces quotas, EU exporters would face greater access restrictions on UK markets, while access for importers from the rest of the world would not improve or even deteriorate. This may sound far-fetched but is currently effectively the strategy of the US government under President Trump. Net exporters such as the financial services sector would still face the same troubles. But in net importing sectors such as manufacturing, import substitution would likely increase output and employment as they substitute imports. In fact, immigration control would likely reduce labour supply growth over time and could even trigger skills shortages, falling unemployment and rising wages. The UK would need less exchange rate depreciation to rebalance the external accounts.

On the flipside, import hurdles and new regulations, if they do not fix market failures, would over time lead to falling productivity and lead to expensive double regulation for many exporters. Over time, the UK's competitive position would erode, leading to rising trade deficits again and to downward pressure on the currency. After 2–3 years, the economic impact might be higher import tariffs, more regulation, lower productivity and lower immigration that would all lead to higher inflation but keep unemployment low. Potential growth would be likely to fall. Under pure inflation targeting, the Bank of England might hike interest rates, even sharply.

This scenario would involve less near-term economic disruption, but long-term decline and lower eventual average living standards, than under our global Brexit scenario.

The debate has not even started

As highlighted above, the verdict on how much freedom future UK governments will have to set tariffs, regulations and immigration laws will depend on the future trade relationship with the EU, which we do not expect to be fully agreed within our forecasting horizon until 2022. So far, there seems to be remarkably little discussion about what the UK might do with any policy freedoms it would gain – for example, on services regulation – under the Chequers proposal. On the immigration side, a move towards 'drawbridge Brexit' currently seems more likely than one towards 'global Brexit', but that could change over time. We would expect a 'global Brexit' outcome to lead to more adjustment pain but higher future growth potential, while a 'drawbridge Brexit' would be more likely to yield the opposite. Future policy may also oscillate between the two or mix elements of both. On balance, we assume that Brexit will, in the long run, reduce potential growth due to less free trade and less free immigration from currently 1.9% to perhaps 1.6%. As this accumulates over time, the long-run cost of such an outcome would be substantial.

2.6 Conclusion

Every now and again, we encounter investors saying 'I would like to discuss the UK economy, but not Brexit'. That's impossible. Output growth may look resilient to the daily flow of news on the process of leaving the EU, but it is currently low by historical standards and in international comparison. Forecasters at the time of the EU referendum in 2016 may have been wrong on the profile and many elements of economic growth, but the overall outcome so far is not much different from what was expected, with perhaps the most notable exceptions of the labour market and fiscal outcomes. We expect further growth weakness ahead of the 29 March 2019 deadline.

Our base case is that the UK and the EU will agree on a transition period during which trading relations with the EU will remain unchanged. That should unblock some of the investment and spending currently held back by uncertainty, raise the value of sterling and lower inflation in 2019. However, uncertainty will remain elevated as it looks likely that the EU and the UK will have to continue negotiating their future relations into the transition period. The final treaty on future relations will take time to be finalised, not least due to the political calendar on both sides and a possibly much more extensive and risky ratification procedure. In the meantime, we base our forecast on an economy where trade relations and immigration rules remain unchanged and where remaining slack in the economy (more in inefficient processes than in remaining unemployment and underemployment) support trend growth rates closer to 2% than common estimates of potential growth of around 1.5%.